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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
097019,667	02/06/98	MAYES	TEX98-01

MM21/1230
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EXAMINER	
NGUYEN, T	
ART UNIT	PAPER NUMBER
2877	

DATE MAILED: 12/30/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/019,667

Applicant(s)
Mayes

Examiner
Tu Nguyen

Group Art Unit
2877



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-27 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-27 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5,6

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---



UNITED STATES DEPARTMENT OF COMMERCE
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Washington, D.C. 20231

Paper No. 7

Serial Number: 09/019667

Filing Date: 02/06/98

Detailed Office Action

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4,11, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 4, "a combine" is indefinite because combine does not specific which objects are combined.

With respect to claim 11, "R and S" is indefinite because it is not defined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-6,16-17, 19-21, 27, are rejected under 35 U.S.C. 102(b) as being anticipated by Tobler et al (5,406,084).

Tobler et al (Tobler hereinafter) disclose a grain detecting system with respect to fig 7 comprising: a near IR light source (10), sample channel (30), an optical pick up and wavelength separator (32), a detector (31),.

With respect to claims 4-6,15: see fig 6, the flowing stream is combined with the light detector (2), a flowing stream is a grain and in a grain processor (20-24).

With respect to claim 6: a storage facility is inherent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3,13,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobler et al (5,406,084) in view of Labaw (5,159,199).

With respect to claims 3,13: Tobler describes a grain analysis system having all the characteristic features of the claimed invention except a linear variable filter and CCD detectors. Labaw teaches a linear variable filter and CCD detector combination which improves the signal to noise ratio. Thus, the skilled artisan would find it obvious to substitute

the linear variable filter and CCD detector combination of Labaw for the grating and detector array of Tobler et al. In view of the improved performance obtained.

Claims 7-12, 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobler et al (5,406,084) in view of Zarling et al. (5,736,410) and Shields (5,241,178).

With respect to claims 7-12: Tobler discloses a computer couple to the detectors (fig 6, 6) and repeatedly detect and calculate the quality of the flowing grain. However, Tobler does not explicitly disclose all the limitation in claims 7,8,9 and 12. Zarling et al. (Zarling hereinafter) disclose an apparatus comprising a fiber optic (fig 6, 82), a mode mixer connected at the end of the fiber (fig 2b, 45). Shields discloses an detector array output which has an analog to digital converter (fig 2, 44). It would have been obvious to one of ordinary skill in the art to modify Tobler apparatus with Zarling and Shield 's apparatus to make the system more convenient and easier for testing.

With respect to claims 22-26, all the steps methods are inherently perform the discussed apparatus.

Claim 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobler et al (5,406,084) in view of Reed et al (5,258,825).

Tobler does not explicitly mention about the constituent components of the grain . However, Reed et al discloses a similar system for determine the constituent of the grain (column 1, line 14-39 or column 2, line 50-59). Thus, the skilled artisan would found it obvious to modify Tobler system to detect the constituent of the grain.

With respect to claim 15, Tobler use the computer for computer the result.

Papers related to this application may be submitted to TC 2877 by facsimile transmission. Papers should be faxed to TC 2877 via the PTO Fax Center located in CP4-4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Center number is (703)308-7722.

If the Applicant wishes to send a Fax dealing with either a Proposed Amendment or for discussion for a phone interview then the fax should:

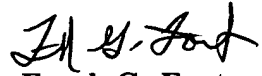
- a) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and
- b) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Tuan Nguyen whose telephone number is (703) 306-9185.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Tu Tuan Nguyen
Patent Examiner
TC 2877
December 18, 1998/TTN


Frank G. Font
Supervisory Primary Examiner
Group Art Unit 2877